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URBAN DISTRICT COUNCIL

ANNUAL REPORT

of the

Medical Officer of Health

and

Senior Sanitary Inspector

1945.

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Health Department,
Council Offices,
Haverton Hill,
22nd July, 1946.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1945.

TO THE CHAIRMAN AND MEMBERS OF THE BILLINGHAM URBAN DISTRICT COUNCIL.

Ladies and Gentlemen,

I have the honour to present my fourth Annual Report, the Report for the year 1945.

This has again been a bumper year for babies. Only thirty less than last year; the total births being 434 and the birth rate 21.4. There were, however, 19 still births, giving a still birth rate of 41.9 per 1,000 total births. This is abnormally high and leaves considerable room for improvement. The infant mortality rate is also high this year. It should not be so great considering the low figure of unemployment and the relatively high prosperity that we have here.

The infantile death rate has been excessive for the past four years and the chief causes of deaths have been prematurity, respiratory diseases and gastro-intestinal infections. The infants who died of these infections were almost without exception bottle fed babies. Many of our infant deaths can therefore be classed as preventable. The highest rate over the four years has been in one particular Ward (Haverton Hill North), which contains most of the poorest property in the area and which is subject to smoke and grit nuisance. This has the indirect effect of driving away better class families who are able to find homes in other areas, leaving the low income group and poorer type of parent in a bigger proportion than in the other wards, such as Chilton's and St. Cuthbert's. Other contributing factors may be shortage of health visitors and failure of parents to take the child's condition seriously enough to send early for medical advice and treatment.

The distribution of vitamin supplements was continued during the year, but the take-up was less than in the previous year. There were periods when supplies ran short and the small extra distribution centres at Wolviston and Cowpen Bewley villages were closed for part of the year. Supplies are now available daily from the Food Office at Haverton Hill and weekly from the voluntary distribution centre at the Billingham Child Welfare Centre.

During the year 26,974 bottles of concentrated orange juice, 2,862 bottles of cod liver oil compound and 475 packets of vitamin A and D tablets were distributed.

There were 1,881 children under 5 years of age and 460 expectant mothers who should have had regular supplies. These vitamin supplements are accessory food factors and it would seem advisable for them to be given as foods and incorporated into the appropriate food stuffs, where the natural vitamin content is likely to be low. Vitamins A and D could be added to margarine (as indeed they are), butter, especially winter butter, canned fish, dried milk, etc. Vitamin C can be added to preserves, jams and jellies and canned or bottled fruit. Vitamin B complex to bread and so on, even at the risk of some fluctuation and irregularity of intake. None of us enjoys taking a pill but we all enjoy our food (or should do), and more so if it has the freshness of flavour associated with the presence of vitamins. The vitamin concentrates could then be used solely on therapeutic grounds for the treatment of definite deficiency diseases.

Education has become one of the most important functions of a health department. There has been a tremendous advance in knowledge on nutrition and ways to improve health as well as in prevention of disease and now the problem is to spread the knowledge we have gained.

Much of this is done directly by health visitors and child welfare clinics in talks and demonstrations, distribution of leaflets, etc., and some of it indirectly by conversation and example of mothers who gather at the clinics, etc. Various exhortations in poster form are displayed on boards in prominent positions throughout the area, but there is great room for expansion in our educational facilities. Next year we hope for considerable improvement in this direction. The personal influence is most important and increase in the staff of health visitors will help here.

The diphtheria immunisation scheme was continued during the year with a big increase in the number of children immunised. Press and wireless propaganda seems to have been very effective and all that most parents need are improved facilities for having the immunisation done. A trained nurse and a canvasser were employed throughout the year with very good results. This year many more children were immunised in the child welfare clinics, in the doctors' surgeries and in the children's own homes as well as in the schools, although there were fewer boosting doses given there than in the previous year, so that the total percentage of children immunised rose to 82%; 61.45% in children under 5 years of age, 92% in children of school age.

There were fewer notifications of tuberculosis this year but a big increase in deaths from tuberculosis, chiefly pulmonary cases. Cases of infectious disease were much less than the previous year, chiefly on account of a big reduction in measles, whooping cough and scabies. Cases of scarlet fever remained about the same level as in 1944, but diphtheria notifications increased considerably, although the actual number of cases finally diagnosed as having had diphtheria was only slightly above that for last year. (27 in 1945 compared with 24 in 1944.) There were no cases of diphtheria in children who had been given adequate dosage of A.P.T. There were 13 cases in children not immunised and 8 cases in those who had been given first doses in 1941 or 1942, when small doses were used, although two of these children later received a boosting dose.

One cannot stress too strongly the need for adequate dosage; at least 0.2 c.c. and 0.5 c.c. of A.P.T., or better 0.3 c.c. and 0.6 c.c. for the first two doses and for repeated boosting doses at intervals of three or four years. Now that the initial immunisation is done when the child is only 9 or 10 months old, the first boosting dose is given at the second birthday, and the second just before the child starts school. Subsequent doses are usually 1 c.c. of T.A.F. given at 8 or 9 years of age and again at 12 or 13 years of age.

Just as the high infantile mortality rate is associated chiefly with one particular ward, so we find the infectious diseases occurring in the more densely populated wards in the area, the rural wards having a consistently low rate. This has been the experience over the the past four years and the importance of this must be stressed when the question of housing and of planning new estates is considered.

To keep infectious diseases at a low level neighbourhood units must be as small and as self contained as possible. Schools also should be as small as possible, especially for young children, and preferably with one in each neighbourhood unit.

Cases of scabies, pediculosis and impetigo were still further reduced in 1945, compared with the two preceding years. There were 346 persons treated for scabies in 1945, 407 in 1944 and 703 in 1943. A staff of two was found adequate to deal with the problem, one male and one female attendant, on a part-time basis. They have continued to do excellent work and to press for the complete household to be treated together as a unit at the same time. In most cases this has been successful, although notification and treatment are no longer compulsory.

Medicated hair oil (lethane) was on sale at the Council Offices and Child Welfare Clinics for the home treatment of pediculosis capitis. The use of methyl formate in bins for the fumigation of bedding and clothing has been continued during the year.

The war-time nurseries at Billingham and Haverton Hill were open the whole year and continued to be as popular as ever. The nursery at Billingham is to be taken over by the Education Authority as a nursery school at the beginning of April and the nursery at Haverton Hill is to continue under the Welfare Authority.

The services of the district nurses continued to be highly valued. In their work of visiting and attending the sick in their homes, they attended between 451 and 688 cases each month, which is again less than the preceding year.

The Child Welfare Centres at Billingham and Haverton Hill have maintained their popularity. The Ante Natal Clinic at Billingham is working to capacity, and I would again urge expansion, and suggest a weekly instead of a fortnightly session.

A reasonably high percentage of expectant mothers attended the Ante Natal Clinics during the year. There were 299 expectant mothers who attended and 434 babies were born in the area during the year. With an extra session many more mothers could attend the ante natal clinics,

There were 154 infants and 312 children aged one to five years, who attended the Billingham Child Welfare Centre, while 85 infants and 195 children aged one to five years attended the Centre at Haverton Hill.

The attendances at the Birth Control and Post Natal Clinic show a decrease. At the Birth Control Clinic there were 44 attendances in 1945 and 57 in 1944, and at the Post Natal Clinics there were 100 attendances in 1945 and 137 in 1944.

The attendances at the Ultra Violet Ray Clinic increased by about 1,000 and this continues to be popular.

The question of a maternity home for the area is still urgent and pressing. Billingham is largely a community of young people and has a high birth rate. There are 5 local midwives working under the Durham County Council, but there are no maternity beds available in the area.

I should like to thank all members of the Health Department for their unstinted help and co-operation, and the Chairman and Members of the Health Committee for their encouragement and support.

I have the honour to be,
Your obedient servant,
L. R. BENHAM,
Medical Officer of Health.

Staff:—

Medical Officer of Health:

Lalage R. Benham, M.B., B.S., D.P.H.

Senior Sanitary Inspector: A. H. Rushworth, C.R.S.I.

Additional Sanitary Inspector: H. Durkin, M.S.I.A.

Clerks: G. W. Nichols, R. Ingram, Miss A. Doran, Miss M. Parkin, Miss L. Smith and Miss S. Wells.

Population.

According to the figures supplied by the Registrar General the resident population of the area is estimated at 20,900. The following figures are calculated on a population of 20,300.

Births.

The number of live births during the year was 434, comprising 211 males and 223 females, which gives a birth rate of 21.4.

The number of still births was 19, made up of 9 males and 10 females. This gives a still birth rate of 41.9 per 1,000 total births.

Deaths.

The total number of deaths was 204, made up of 121 males and 83 females. This gives a death rate of 10.05, and of this the largest incidence was from:

	Male	Female
Heart Disease	31	15
Cancer	12	8
Tuberculosis	5	12
Bronchitis	10	4
Intra-Cranial Vascular Lesions	7	5
Prematurity	7	4

During the year there were 30 deaths of children under one year of age, 21 males and 9 females; this gives an infantile death rate of 69 per 1,000 live births.

The following table gives the location, approximate population in each ward, number of deaths, rate per 1,000 and percentage of deaths in each ward to total number of deaths:—

Ward	Est. Pop.	Deaths	Death Rate per 1000	% of Total Deaths per Ward
Haverton Hill North	5132	71	13.8	34.8
St. Cuthberts	5805	51	8.7	25.0
Chiton's	5012	46	9.1	22.5
Haverton Hill South	2003	10	4.9	4.9
Port Clarence	1076	15	13.9	7.4
Wolviston	1121	9	8.0	4.4
Cowpen Bewley ...	151	2	13.2	1.0
	20300	204	10.05	100.0

Comparison of Infantile Death Rates.

Billingham, 69; Stockton, 53; England and Wales, 46.

The Infantile Death Rate of 69 is 13 lower than 1944, but when compared with England and Wales is high.

Infantile Mortality.

The following table shows that out of 143 births in the Haverton Hill North Ward, 17 died, which gives a death rate of 119 per 1,000 births. Cowpen Bewley, with 1 death, had a rate of 333, and Port Clarence, 1 death, had a rate of 53. Chilton's Ward comes next with 49, followed by St. Cuthbert's Ward with 38, and Haverton Hill South with 34. There were no deaths in the Wolviston Ward.

Ward	Births	Infant Deaths	Death rate per 1,000	% of total deaths per ward
Haverton Hill North ...	143	17	119	56.67
St. Cuthbert's	132	5	38	16.67
Chilton's	101	5	49	16.67
Haverton Hill South ...	29	1	34	3.33
Port Clarence	19	1	53	3.33
Cowpen Bewley	3	1	333	3.33
Wolviston	7	—	—	—
TOTALS	434	30	69.1	100.00

During the past four years just over half the total infant deaths occurred in Haverton Hill North. St. Cuthbert's comes next on the list with approximately 23% of the deaths, while Chilton's has only 15%.

In 1945 premature infant deaths numbered 11, gastro intestinal cases 8 (seven of these infants were artificially fed), respiratory diseases accounted for 6 (including two of the premature infants), and convulsions 4 (cause unknown).

There is no doubt that Haverton Hill North is the Ward which is responsible for the high infantile mortality, even though St. Cuthbert's Ward over the total period has also a rate above the average for England and Wales.

The following table gives the Infantile Deaths for the years 1942 to 1945 in Wards, and the percentage of each Ward to the total deaths for the four years:—

Ward	1942	1943	1944	1945	Total	Percentage
Haverton Hill North	11	12	18	17	58	50.88
St. Cuthbert's	5	7	9	5	26	22.80
Chilton's	4	1	7	5	17	14.91
Port Clarence	1	3	1	1	6	5.25
Haverton Hill South	1	—	1	1	3	2.63
Cowpen Bewley	—	—	1	1	2	1.76
Wolviston	—	1	—	—	1	.88
Unknown	—	—	1	—	1	.88
Totals ..	22	24	38	30	114	100.00

A table showing Infantile Deaths under one day, under one week, under one month and under one year is shown below:—

Disease	1 day or under	under 1 week	under 1 month	under 1 year	Total
Marasmus	—	—	—	4	4
Convulsions	—	—	1	3	4
Bronchitis	—	—	—	2	2
Prematurity	7	2	1	1	11
Icterus Neonatorum ...	—	1	—	—	1
Pneumonia	—	—	—	4	4
Gastro Enteritis ...	—	—	1	3	4
Totals	7	3	3	17	30

Notifiable Diseases.

A total of 303 cases of infectious diseases was notified during the year, which is 231 less than the figure of 534 for the year 1944.

Separate figures are given below, together with the corresponding figures for 1944:—

Disease	1944	1945
Diphtheria	32	52
Scarlet Fever ...	66	62
Whooping Cough	48	18
Measles	208	50
Pneumonia	16	7
Dysentery	—	6
Meningitis	1	5
Eyrsipelas	10	6
Scabies	152	97
Typhoid	1	—
Totals	534	303

The decrease in the total number of notifications, as compared with 1944, is mainly caused by measles and scabies, which were responsible for a reduction of 213—measles 158 and scabies 55.

Diphtheria notifications increased by 20; of these 16 children and 9 adults were finally diagnosed as suffering from conditions other than diphtheria, leaving 27 who had the disease. There were three deaths, a woman aged 65 years, a child aged 5 years and a child aged 18 months. Neither of the children had been immunised.

Scarlet Fever notifications decreased by 4, and of these two were diagnosed as measles, but one case notified as diphtheria had scarlet fever. This makes a total of 61 who suffered from the disease. They were treated in hospital and made a good recovery.

Notifications of Whooping Cough decreased by 30, Pneumonia by 9 and Erysipelas by 4, but Meningitis increased by 4.

There were 6 notifications of Dysentery, as against none in 1944. One was diagnosed finally as dysentery, 3 as gastro enteritis and 2 as enteritis. A child aged 8 months diagnosed as gastro enteritis died in hospital.

It would be helpful if gastro intestinal infections were classed together and made notifiable, instead of simply dysentery. So many cases of summer diarrhoea have been found to be cases of Sonne dysentery, and there are other organisms which may cause a mild illness, while in other cases the causal organism is not isolated. Notification ensures an early visit to the home and proper investigation, although, as also in the case of scarlet fever, removal to hospital is not always necessary or even advisable.

Location of Infectious Diseases.

The following tables give (a) the location of infectious diseases in the various wards, (b) the percentage of children in each ward, together with the percentage of each disease, and (c) the notification rate per 1,000 of the population in the case of diphtheria, scarlet fever, whooping cough, measles and scabies. Figures for the year 1944 are shown in respect of tables (a) and (b) for comparison.

I have endeavoured to give, as accurately as possible, the number of children living in each ward.

(a) Location of Diseases.

Ward	Children in Ward.	Diph.	S. Fever	Measles	Scabies	W. Cough.	Total
Haverton Hill N.							
1945	1796	19	13	14	35		81
1944	1820	7	8	41	45	7	108
St. Cuthbert's							
1945	1692	13	33	26	27	11	110
1944	1720	15	28	84	50	29	206
Chilton's							
1945	1336	16	14	9	28	6	73
1944	1350	9	27	60	49	12	157
Port Clarence							
1945	338	4	1		1		6
1944	350	1		1	2		4
Haverton Hill S.							
1945	320		1	1	4		6
1944	33		2	3	3		8
Wolviston							
1945	159	...			2	1	3
1944	160	...	1	19	...	...	20
Cowpen Bewley							
1945	37	...			...		
1944	37	...			3		3
1945 Totals	5678	52	62	50	97	18	279
1944 ,,	5767	32	66	208	152	48	506

(b) Percentage of Diseases and Children in Wards.

Ward	Children in. Ward	Diph.	S. Fever	Measles	Scabies	W. Cough.	Total.
Haverton Hill N.							
1945	31.63	36.5	20.96	28.0	36.09	...	29.04
1944	31.56	21.9	12.1	19.7	29.6	14.6	21.35
St. Cuthbert's							
1945	29.8	25.0	53.25	52.0	27.84	61.11	39.44
1944	28.81	46.9	62.4	40.4	32.9	60.4	40.71
Chilton's							
1945	23.53	30.8	22.57	18.0	28.86	33.34	26.17
1944	23.42	28.1	40.9	28.8	32.3	25.0	31.03
Port Clarence							
1945	5.96	7.7	1.61		1.03	...	2.14
1944	6.07	3.1	...	.5	1.3	...	.79
Haverton Hill S.							
1945	5.63	...	1.61	2.0	4.12	...	2.14
1944	5.73	...	3.1	1.5	1.95	...	1.58
Wolviston							
1945	2.8	...	...	...	2.06	5.55	1.07
1944	2.76	...	1.5	9.1	...	...	3.95
Cowpen Bewley							
1945	.65	...	...	...	...	...	...
1944	.65	...	...	...	1.95	...	.59

(c) Notification Rate per 1,000 of Population.

Disease	1945	1944
Diphtheria	2.56	1.58
Scarlet Fever ...	3.05	3.25
Measles	2.46	10.25
Scabies	4.77	7.48
Whooping Cough	.88	2.36

As was the case in the last three years, the highest incidence of infectious diseases amongst children occurred in the St. Cuthbert's Ward; Haverton Hill North came next and then Chilton's.

Diphtheria notifications showed increases of 12 in Haverton Hill North Ward, 7 in Chilton's Ward and 3 in the Port Clarence Ward. There were no notifications in either Haverton Hill South, Wolviston or Cowpen Bewley Wards.

Scarlet Fever cases notified increased by 5 in Haverton Hill North, by 5 in St. Cuthbert's and 1 in Port Clarence Wards. but decreases of 13 in Chilton's and of 1 in Haverton Hill South Wards were recorded.

St. Cuthbert's Ward, with 110 notifications, has a percentage of 39.44 of the diseases taken into consideration in the above tables. Haverton Hill North had 81 notifications, or 29.04%, and Chilton's 73, or 26.17%.

In the Haverton Hill North Ward there were 81 notifications, made up of 18 diphtheria, 13 scarlet fever, 14 measles and 35 scabies. A comparison between the area as a whole, and the Cowpen Estate, which is an area surrounded by open spaces, shows 22 notifications from the Estate. These were 3 diphtheria, 3 scarlet fever, 9 scabies and 7 measles. This equals 27.16% of the notifications from the whole Ward, as against 36.65% last year, when there were 29 notifications for the Estate.

Analysis of the notifications of infectious diseases over the past four years into Wards has been made in the following tables:—

Haverton Hill North.

Whole Ward	Year				Cowpen Estate	Year			
Disease	1942	1943	1944	1945	Disease	1942	1943	1944	1945
Diphtheria	26	6	7	19	Diphtheria ...	4	2	2	3
Scarlet Fever ...	9	12	8	13	Scarlet Fever	6	8	5	3
Whooping Cough	2	17	7	...	Whooping Cough	2	6	7	...
Measles	26	50	41	14	Measles	24	13	12	7
Pneumonia	7	4	7		Pneumonia ...	3	3	..	...
Erysipelas....	1	1	...		Erysipelas .				...
Dysentry	2	...	...	2	Dysentry ..		...		...
Meningitis	1	...	...	1	Meningitis ..	1		..	...
Scabies	...	2	45	35	Scabies		2	15	11
Totals ...	74	92	115	84	Totals ...	40	34	41	24

St. Cuthbert's Ward.

Disease	1942	1943	1944	1945
Diptheria	22	14	15	13
Scarlet Fever ...	20	18	28	33
Whooping Cough ..	6	16	29	11
Measles	82	101	84	26
Pneumonia ...	9	7	6	4
Erysipelas	5	1	3	5
Dysentry	2	3	...	4
Meningitis	...	1	1	1
Scabies	...	4	50	27
Totals ...	146	165	216	124

Chilton's Ward.

Disease	1942	1943	1944	1945
Diphtheria ..	21	15	9	16
Scarlet Fever	10	20	27	14
Whooping Cough	...	20	12	6
Measles	105	38	60	9
Pneumonia .	6	5	3	3
Erysipelas .	1	2	6	1
Dysentry	4	2	...	...
Meningitis ...	1	...	...	3
Scabies	...	1	49	28
Totals ..	148	103	166	80

Haverton Hill South.

Disease	1942	1943	1944	1945
Diphtheria	2	4		
Scarlet Fever ...			2	1
Whooping Cough ..	..	1		
Measles		10	3	1
Pneumonia ...			...	
Erysipelas		..		
Dysentry				
Meningitis				
Scabies			3	4
Totals ..	2	15	8	6

Port Clarence.

Disease	1942	1943	1944	1945
Diphtheria	1	3	1	4
Scarlet Fever			..	1
Whooping Cough ...				
Measles		9	1	
Pneumonia .		1		
Erysipelas ...		1	...	...
Dysentry			...	
Meningitis ...		1	...	
Scabies			2	1
Totals ..	1	15	4	6

Wolviston.					Cowpen Bewley.				
Disease	1942	1943	1944	1945	Disease	1942	1943	1944	1945
Diphtheria	1	1	...		Diphtheria	...	...	...	
Scarlet Fever	2	...	1	...	Scarlet Fever	...	...	...	
Whooping Cough			...	1	Whooping Cough	...	...	...	...
Measles		5	19		Measles	...	1	...	
Pneumonia	...	1	1	..	Pneumonia	...	1	...	
Erysipelas			1		Erysipelas	...	...	...	..
Dysentry	...		...	...	Dysentry	...	...	...	
Meningitis			...	...	Meningitis	...	...	...	
Scabies		...		2	Scabies	...	...	3	
Totals	3	7	22	3	Totals	...	2	3	

To ensure greater accuracy in comparing the various areas another table has been made of the numbers of notifications of scarlet fever and diphtheria, as these were all cases which required removal to hospital.

In some areas both measles and whooping cough are treated more lightly than in other areas. Many cases are nursed at home without calling in a doctor, and fail to be notified. It is therefore difficult to estimate the exact incidence of both these diseases.

The table of scarlet fever and diphtheria notifications, as well as the total infectious diseases, shows that the incidence of infectious disease falls most heavily on those children living in the more densely populated areas. The villages of Cowpen Bewley, Wolviston and Port Clarence, and the small estate of Haverton Hill South all through have escaped relatively lightly, although only the first two can be classed as rural areas.

When analysed into percentages we find that 94.27% of the scarlet fever and diphtheria occurred in the three Wards of St. Cuthbert's, Chilton's and Haverton Hill North, which together contain 85% of the children. Thirty-two per cent of the children live in the Haverton Hill North Ward, 30% in St. Cuthbert's and 23% in Chilton's, while only 6% of the children reside in Haverton Hill South, 6% in Port Clarence, 3% in Wolviston and ½% in Cowpen Bewley.

PERCENTAGE OF CHILDREN IN WARDS AND PERCENTAGES OF NOTIFICATIONS RECEIVED.

SCARLET FEVER.

Ward	% of Children	Percentage of Notification				Total % over the 4 years
		1942	1943	1944	1945	
Haverton Hill North	31.7	21.9	24.0	12.1	20.9	19.18
St. Cuthbert's	30.0	48.8	36.0	42.4	53.3	45.2
Chilton's	23.5	24.4	40.0	40.9	22.6	32.42
Port Clarence	5.8	...	...	...	1.6	.46
Haverton Hill South	5.6	...	...	3.1	1.6	1.37
Wolviston	2.8	4.9	...	1.5	...	1.37
Cowpen Bewley	.6	...	...	...	...	...

DIPHTHERIA.

Ward	% of Children	Percentage of Notification				Total % over the 4 years
		1942	1943	1944	1945	
Haverton Hill North	31.7	35.6	14.0	21.9	36.5	29.0
St. Cuthbert's	30.0	30.1	32.5	46.9	25.0	32.0
Chilton's	23.5	28.8	34.9	28.1	30.8	30.5
Port Clarence	5.8	1.4	7.0	3.1	7.7	4.5
Haverton Hill South	5.6	2 7	9.3		...	3.0
Wolviston	2.8	1.4	2.3	...	...	1.0
Cowpen Bewley	.6	...			...	...

Vital Statistics.

The following are extracts from the vital statistics supplied by the Registrar General:—

Births—

	Male	Female	Total	
Legitimate	195	206	401	
Illegitimate	16	17	33	
	211	223	434	= Birth Rate of 21.4 per 1,000

Still Births—

Legitimate	8	10	18	
Illegitimate	1	—	1	
	9	10	19	= 41.9 per 1,000 births

Deaths—

	121	83	204	= Death Rate of 10.05 per 1,000

Infantile Deaths—

Legitimate	19	8	27	
Illegitimate	2	1	3	
	21	9	30	= Death Rate of 69 per 1,000 live births

Women Dying in Consequence of Childbirth:—

From Sepsis	Nil
From other causes	1

Causes of Death.

	Male	Female	Total
Diphtheria	1	2	3
Tuberculosis—Pulmonary	5	9	14
Tuberculosis—Other	—	3	3
Syphilitic Disease	1	2	3
Cancer of Buc. Cav. and Oesophagus (M) Uterus (F)	2	2	4
Cancer of Stomach & Duodenum	4	1	5
Cancer of all other sites	6	5	11
Diabetes	1	3	4
Intra-Cranial Vascular Lesions ...	7	5	12
Heart Disease	31	15	46
Other disorders of Circulatory System	7	4	11
Bronchitis	10	4	14
Pneumonia	4	3	7
Other Respiratory Diseases ...	2	—	2
Ulcer of Stomach & Duodenum ...	3	—	3
Diarrhoea under 2 years	—	2	2
Other Digestive Diseases	4	2	6
Nephritis	1	4	5
Maternal Causes	—	1	1
Prematurity	7	4	11
Congenital Maladies, Birth Injuries and Infantile Diseases ...	5	—	5
Road traffic accidents	—	1	1
Other violent causes	5	2	7
All other causes	15	9	24
	121	83	204

Tuberculosis.

The following tables show the numbers of new notifications, both pulmonary and non-pulmonary, and the number of deaths reported in the different age groups:—

Age Period years	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females	Males	Females
0 - 1	—	—	—	—	—	—	—	—
1 - 4	1	—	2	—	—	—	—	1
5 - 14	1	4	2	—	—	2	—	2
15 - 24	1	2	1	1	—	2	—	—
25 - 34	1	1	—	—	1	2	—	—
35 - 44	—	1	—	—	1	—	—	—
45 - 54	3	—	—	—	3	3	—	—
55 - 64	—	—	—	—	—	—	—	—
65 and up	—	—	—	—	—	—	—	—
Totals ..	7	8	5	1	5	9	—	3

This shows a total of 21 notifications during the year, as against 24 for 1944. Deaths total 17, an increase of six on last year.

The number of new notifications of pulmonary tuberculosis was 15. This is a decrease of 5 on the 1944 figures. The highest incidence is in the 5 to 14 age group, with a total of 5, and there were 3 cases each in the 15 to 24 and 45 to 54 age groups.

Pulmonary Tuberculosis—New Cases.

Age period	1945	1944
1 - 4	1	—
5 - 14	5	2
15 - 24	3	5
25 - 34	2	7
35 - 44	1	3
45 - 54	3	3
55 - 65	—	—
Totals:—	15	20

Diphtheria Immunisation.

The following figures show the number of children immunised in the groups 0 to 5 and 5 to 15 years, at the end of the year 1945.

0 to 5 years. 1,881 children—1,156 immunised = 61.45%
5 to 15 years. 3,797 children—3,500 immunised = 92.17%

This gives a percentage of 82 immunised of a total of 5,678 children in the Area.

A comparative table showing the number of doses given to children during the years 1942, 1943, 1944 and 1945, together with the place where the immunisation was carried out, is set out below :—

1942.

	1st	2nd	3rd	Total
Child Welfare Clinics and Nurseries	128	72	—	200
Schools	567	332	—	899
Surgeries	191	180	—	371
Home/Car	—	—	—	—
	886	584	—	1470

1943.

Child Welfare Clinics and Nurseries	425	289	78	792
Schools	96	55	662	813
Surgeries	58	42	2	102
Home/Car	25	5	—	30
	604	391	742	1737

1944.

Child Welfare Clinics and Nurseries	221	161	152	534
Schools	189	120	1365	1674
Surgeries	52	32	25	109
Car/Home	9	8	1	18
	471	321	1543	2335

1945.

Child Welfare Clinics and Nurseries	322	251	245	818
Schools	228	174	828	1230
Surgeries	175	182	123	480
Home	142	183	39	364
	867	790	1235	2892

The scheme was continued throughout 1945 and was pursued with even more vigour, so as to get as many pre-school children immunised as possible. A larger number of doses were given this year than in any previous year, and this raised the percentage of children immunised from 68.3% to 82%. A pleasing feature was the increase from 48.3% to 61.45% in the children under 5 years of age. This was brought about to a large extent by the employment of a canvasser to visit the homes and obtain signed consent forms from the parents. A trained nurse was also engaged to visit homes and immunise any children whose parents found difficulty in attending the Child Welfare Centre or Doctors' Surgeries. The nurse also proved very useful in giving the second injection when the parents were unable to re-attend the centre or surgery, and so obviated the necessity of the child having to receive a repeated first injection or failing to be immunised at all. The discrepancy between the numbers who received the first and second doses and those who received first doses only is much less in the years 1944 and 1945. In 1942, 302 children missed having the second dose, in 1943 there were 213, in 1944 the number was 150, and in 1945 only 77. This improvement has been brought about partly by better office work, but chiefly by the home visits of the canvasser and the nurse.

Cases of Diphtheria in Children.

There was a total of 37 cases in diphtheria notified in children during the year, but of these 12 were found to have had tonsillitis, 2 measles, 1 scarlet fever and 1 stomatitis, leaving 21 children who had diphtheria.

There were two deaths, one child aged 18 months and the other aged 5 years. Neither of these children had been immunised.

Of the 21 cases finally diagnosed as diphtheria, 13 had not been immunised, the parents of 7 refusing to have their children protected. All the remaining 8 were immunised in 1941 or early 1942 with the small doses which were then used, though one child had a third injection in 1943, and another had the third in 1945, eight months before the disease developed.

One cannot stress too strongly the need for adequate dosage of A.P.T. (at least 0.2 c.c. and 0.5 c.c., or better 0.3 c.c. and 0.6 c.c. for the first two doses), and for repeated boosting doses at as short an interval as is practicable.

Scabies.

The scheme for the treatment of scabies and verminous conditions was continued throughout the year at the Hostel Treatment Centre, Haverton Hill. Afternoon and evening sessions were held on Tuesday, Wednesday, Thursday and Friday, and a morning session on Saturday. This arrangement was continued until the 8th September, when the Saturday morning session was transferred to Tuesday morning, as it was found that there were practically no attendances on Saturdays.

The number of cases treated and the number of treatments showed a continued decline, the numbers being 346 against 407 and 907 against 1,299.

The doctors' sessions were reduced to once every four weeks instead of fortnightly on account of the greatly reduced volume of work and were done by the Medical Officer of Health, instead of by a rota of general practitioners and the Medical Officer, as formerly.

Thirty children with verminous heads were cleansed and 2 persons were treated for pediculous corporis. Impetigo is only treated at the Hostel Treatment Centre when it occurs as a complication of scabies or pediculous capitis. All other cases in children were treated at the school clinic.

1945	Cases		Cases Treated			Treatments			
	Notified	Treated	Primary	Contacts	Total	Scabies	Impetigo	Vermin	Total
January ..	10	36	16	20	36	78	3	...	81
February ..	11	61	15	46	61	124	12	1	137
March ...	19	46	15	31	46	41	23	19	83
April ...	4	16	9	7	16	26	17	...	43
May ...	4	5	3	2	5	7	11	...	18
June ...	6	23	6	17	23	58		3	61
July ...	12	20	7	13	20	56	2	...	58
August ...	1	3	1	2	3	7	1	...	8
September ...	6	23	5	18	23	49	22	7	78
October ...	5	11	3	8	11	16	27	...	43
November	11	56	14	42	56	122	46	...	168
December ...	8	46	10	36	46	85	44	...	129
Totals ...	97	346	104	242	346	669	208	30	907

1945	Persons suffering from Scabies and or Impetigo			
	Adult	School Children	Under 5 years	Total
January ...	15	13	8	36
February ...	28	22	11	61
March ..	19	21	6	46
April ...	5	8	3	16
May ..	2	3	—	5
June ..	11	5	7	23
July ..	7	8	5	20
August ..	—	3	—	3
September ...	7	9	7	23
October ...	3	4	4	11
November ..	24	21	11	56
December ..	14	24	8	46
Totals	135	141	70	346

1945	Daily Treatments			No. of Drs. Sessions	No. of Cases seen each session		
	Min.	Max.	Average		Min.	Max.	Average
January	1	15	3.7	1	—	25	25
February ..	1	16	6.8	1	—	37	37
March ..	1	9	3.9	1	—	32	32
April ..	1	6	3.1	1	—	26	26
May ...	—	3	.9	1	—	18	18
June ...	1	10	2.6	1	—	26	26
July ...	1	10	2.9	1	—	11	11
August	—	2	.05	—	—	—	—
September ...	2	11	4.9	1	—	25	25
October	1	5	2.3	1	—	33	33
November	3	17	9.3	2	33	56	44
December	2	18	8.6	1	—	16	16

1944	Cases		Cases Treated			Treatments			
	Notified	Treated	Primary	Contacts	Total	Scabies	Impetigo	Vermin	Total
January	15	67	17	50	67	249	...	16	265
February .	11	35	10	25	35	126	68	...	194
March ...	14	46	15	31	46	97	11	...	108
April ...	11	23	5	18	23	63	...	...	63
May ...	10	19	4	15	19	33	25	...	58
June ...	13	45	14	31	45	105	15	...	120
July	4	25	7	18	25	60	...	...	60
August ...	7	35	14	21	35	78	...	...	78
September ...	31	37	14	23	37	88	...	...	88
October ...	8	28	8	20	28	81	1	...	82
November ...	15	23	9	14	23	55	50	...	105
December ..	13	24	7	17	24	42	36	—	78
Totals ...	152	407	124	283	407	1077	206	16	1299

1944	Persons suffering from Scabies and or Impetigo			
	Adult	School Children	Under 5 years	Total
January ...	35	22	10	67
February ...	18	12	5	35
March ...	20	19	7	46
April ...	15	7	1	23
May ...	8	6	5	19
June ...	22	17	6	45
July ...	11	10	4	25
August ...	17	11	7	35
September ...	17	16	4	37
October ...	14	7	7	28
November ...	5	16	2	23
December ...	11	6	7	24
Totals ...	193	149	65	407

1944	Daily Treatments			No. of Doctor's Sessions	No. of cases seen each session		
	Min.	Max.	Average		Min.	Max.	Average
January ...	1	18	10	4	12	44	25
February ...	3	19	8	4	22	50	35
March ...	1	14	5	5	7	65	29
April ...	1	10	3	3	6	33	18
May ...	0	11	4	1	13	13	13
June ...	0	12	4.7	3	5	11	7
July ...	0	13	2.5	2	3	4	3.5
August ...	0	7	2.9	3	7	12	9.6
September ...	0	10	3.4	2	7	13	10
October ...	0	12	3.1	2	20	29	24
November ...	0	9	4.3	2	8	18	13
December ...	1	10	4.6	2	1	23	12

1943	Cases Treated	Primary Cases	Contacts	Treatments			Total
				Scabies	Impetigo	Vermin	
February	90	37	53	247	63		310
March	103	47	56	371	99	...	470
April	99	34	65	218	79	19	316
May	94	42	52	365	...	21	386
June	51	35	16	274	28	24	326
July	57	27	30	183	26	55	264
August	33	27	6	153	93	15	261
September	62	17	45	176	79		255
October	38	18	20	239	55		294
November	41	19	22	212	27		239
December	35	9	26	97	2		99
Totals ...	703	312	391	2535	551	134	3220

1943	Persons suffering from Scabies and/or Impetigo			
	Adult	School Children	Under 5 years	Total
February ...	19	54	9	82
March ...	26	79	8	113
April ...	59	28	10	97
May ..	35	51	8	94
June ...	16	26	9	51
July ...	16	32	9	57
August ...	12	13	8	33
September ...	21	29	12	62
October ...	10	19	9	38
November ...	12	23	6	41
December ...	10	16	9	35
Totals ...	236	370	97	703

1943	Daily Treatments			No. of Doctor's Sessions	No. of cases seen each session		
	Min.	Max.	Average		Min.	Max.	Average
February ...	4	31	13	3	16	42	26
March ...	6	44	17	5	11	52	36
April ...	2	28	14	5	13	27	21
May ...	11	39	15	4	26	48	37
June ...	4	18	13	4	21	43	28
July ...	2	21	10	5	15	32	28
August ...	4	16	10	4	14	28	22
September ...	4	24	10	5	13	26	18
October ...	2	23	15	3	20	32	26
November ...	4	19	9	6	21	48	32
December ...	...	12	4	5	3	20	15

War-Time Nurseries.

The Nursery, Tame Street, Haverton Hill.

Mrs. Murray has been Matron in charge since the Nursery opened in May, 1942. The staff consists of a Matron (a fully trained nurse), 1 Staff Nurse, 2 child care reserve trained Assistant Nurses, 2 Nursery Assistants, a warden (CCR trained), a cook and a cleaner.

The nursery has been well filled all the year, and several children have been admitted on medical grounds and have made considerable improvement.

Matron reports that the year has been very fortunate with regard to infectious disease, and there was not a single case during the year, except for one child who developed whooping cough, fortunately while she was away from the nursery, so that there were no contacts or second cases at the nursery. There were a few cases of diarrhoea, but none of them specific.

Several children received treatment for scabies, but owing to the proximity of the treatment centre, where children can be treated as soon as the condition is found, none of the children had to be excluded on account of scabies.

It has been found possible to accommodate the children of expectant mothers for one month before and one month after confinement. Mothers find the nursery a great blessing, knowing their children to be safe from traffic dangers, etc., during this anxious period. There were two families who were accommodated when their mothers had been rushed off to hospital in the night, leaving a worried father to care for the children. There are also many cases of children who have lost a parent by death or separation, or who are illegitimate and need the care of the nursery by day, while their parents or guardians are at work. Matron considers some of these children should be admitted free in necessitous cases, or at reduced cost. She also considers that there should be more nursery accommodation, as there is such a marked difference in the physique and alertness of the children who have been some time in the nursery. Some children have been admitted in a pitiful condition of debility, anaemia, etc., and all have shown improvement, and one child probably had its life saved by the care it received in the nursery. This was a neglected illegitimate baby.

There are always children who require ultra violet ray treatment, but the difficulty is always in conveying them to and from the Child Welfare Centre.

A table of attendances is given below:—

Month	Days open	Total attendance	Daily average	Daily max.
January	24	318	13.2	18
February	24	448	18.6	27
March	26	597	22.9	27
April	24	546	22.7	31
May	23	594	25.8	32
June	26	728	28.0	35
July	25	830	33.2	40
August	24	703	29.2	36
September	25	792	31.7	36
October	27	907	33.6	38
November	26	907	34.9	38
December	23	604	26.2	32

The Nursery, Cheviot Crescent, Billingham.

Miss E. Rafferty is the Matron in charge of this Nursery, having succeeded Miss O'Hare in 1944.

Matron reports that the Nursery, which has been open for nearly four years, will be taken over by the Education Authority on 1st April, 1946.

Mothers have greatly appreciated the Nursery, as the children are left each day with the knowledge that they will be well fed and carefully tended, besides being taught independence and self reliance, while getting the maximum amount of fresh air and exercises, more than is usually possible for children of their age.

The children have been taught to wash and dress themselves and to help each other. They have been a very happy community under the guidance of the Matron and their teacher, Mrs. E. Bathe.

All the children have been immunised and have had the benefit of medical supervision.

The Nursery is to be re-opened on 1st April, 1946, as a Nursery School for children between the ages of two to five years. During 1945 the daily average attendance has been over 20. March, April, May, June and July have been the busiest months. January was the worst, probably on account of the weather.

A table showing the attendances is given below :—

Month	Days open	Total attendance	Daily average	Daily max.
January	25	361	14.4	22
February	24	516	21.5	29
March	26	651	25.0	33
April	24	558	23.2	31
May	24	539	22.4	30
June	26	625	24.0	31
July	26	660	25.4	32
August	24	448	18.6	24
September	25	574	22.9	29
October	27	625	23.1	28
November	26	574	22.0	27
December	24	482	20.0	27

Billingham Urban District Nursing Association.

This is a Voluntary Association, administered by a local Committee and supported by voluntary contributions. The bulk of the Association's income is received from workmen employed in the various industries in the area, who allow ½d. per week to be deducted from their wages and paid over to the Association.

The Staff consists of three fully-trained Sisters, one of whom acts as Sister-in-Charge.

Nurses' Homes are provided at 51, Bedale Avenue, Billingham and 1, Cedar Terrace, Port Clarence, both of which are provided with telephone facilities. The Association caters for a population of approximately 23,000 residing in Billingham, Haverton Hill, Port Clarence and Cowpen Bewley, and during the past year, by agreement with the Greatham Association, the Association has extended its boundaries to include the residential part of Wolviston. During the year ended 31st March last, the Association's Nursing Sisters attended to 356 cases, involving 7,306 visits.

Equipment is provided free on loan by the Association, such as bed-pans, back-rests, waterproof sheets, etc. The Association has also five invalid carriages and a spinal carriage available for those residents needing the use of same.

The following table shows the number of medical, surgical and casual visits made during the year. Most of these are in Billingham, which is the main residential area.

Month	Medical	Surgical	Casual	Total
January	323	231	13	567
February	254	189	8	451
March	212	235	16	463
April	179	346	12	537
May	292	246	7	545
June	333	242	22	597
July	288	241	5	534
August	307	246	14	567
September	321	331	5	657
October	273	381	4	658
November	294	319	8	621
December	320	307	9	636

The location of the cases treated, the number of new cases sent in by doctors and those received from other sources, are shown in the following table. A few accidents were treated, but these are included under the heading "other sources."

	Port Clarence	Haverton Hill	Billing-ham	Sent by Doctors	Other Sources
January	65	129	373	21	1
February	53	89	309	20	1
March	91	92	280	21	2
April	94	107	336	24	2
May	89	105	351	33	2
June	86	106	406	27	1
July	119	57	358	23	3
August	85	102	380	17	4
September	87	127	443	25	3
October	119	105	434	29	3
November	147	90	384	24	5
December	117	171	348	23	3

SENIOR SANITARY INSPECTOR'S REPORT FOR 1945.

Sanitary Inspector's Department,
Council Offices,
HAVERTON HILL.

May, 1946.

Mr. Chairman, Ladies and Gentlemen,

I beg to submit herewith my Twenty-first Annual Report on the work of my department. This year has seen the end of the war and with it the burdensome duties of Civil Defence. The organisation of the Casualty Services, for which I was responsible, was really the duty of another Official. Additionally, I was responsible for the decontamination of foodstuffs, the salvage of waste materials and later, the operation of the Council's Ambulance Service. These duties, coupled with serious staff difficulties due to the fact that the four members of my staff were called up for service with H.M. Forces, made conditions very difficult, and most of my ordinary work was greatly neglected. However, with the willing help of the temporary staff, and the tolerance shown by the Council, these various duties were made more easy and eventually carried out in, I hope, a satisfactory manner. It is already apparent that the post-war period will not be free from difficulties and some time will elapse before the return to normal conditions. This point is illustrated by reference to such items as "Housing," "Overcrowding," "Shops" and "Meat Inspection." Details of the report are given under appropriate headings in the usual order.

In conclusion, I would express my warm appreciation to the Chairman and Members of the Public Health Committee for their sympathetic consideration of my difficulties and their generous support on all matters put before them. I wish also to freely acknowledge the willing assistance I have received from the members of my staff.

I am,
Your obedient Servant,
A. H. RUSHWORTH,
Senior Sanitary Inspector.

SUMMARY OF INSPECTIONS MADE AND OTHER DETAILS.

Dwellinghouses, under Public Health Act	206
„ under Infectious Diseases	92
„ and schools disinfected	77
Works in progress	47
Premises under notice	60
Overcrowding	8
Verminous and dirty premises	41
Miscellaneous housing visits	49
Complaints investigated	525
Water supply	12
Drains tested or inspected	236
Stables and piggeries	8
Offensive accumulations	2
Fried fish shops	2
Factories and workplaces	14
Bakehouses	6
Theatres and places of entertainment	3
Refuse collection	51
Refuse disposal	79
Rats and mice	316
Smoke observations	126
Shops	25
Public Baths	9
Samples of Public Baths water obtained	3
Salvage	3
Allotments	1
Miscellaneous sanitary visits	56
Slaughterhouses	1
Butchers' "Making-up" places	8
Meat and other foods	111
Cowsheds	11
Dairies and milkshops	13
Ice-cream premises	5
Restaurants and canteens	4
Street vendors and hawkers' carts	2
Water samples obtained	1
Milk samples taken for bacteriological examination ...	24
Milk samples taken for biological T.B. examination ...	24
Samples of Food & Drugs obtained	20
Interviews	214
Dustbins	436

NUMBER AND TYPE OF NOTICES.

Informal notices served	421
Informal notices complied with	393
Informal notices outstanding from previous year complied with	8
Statutory notices served	3
Statutory notices complied with	3

SUMMARY OF NUISANCES ABATED AND DEFECTS REMEDIED.

HOUSES.

Internal dampness	1
Defective roofs	7
„ floors	1
„ eavesgutters and fallpipes	6
„ plasterwork	1
„ walls	1
„ yard pavings	1
„ coppers	1
„ water-pipes and taps	8
„ sink waste pipes	2

WATER CLOSETS.

Defective doors	1
„ roofs	1
„ plasterwork	1
„ cisterns	1
„ pedestals	3

MISCELLANEOUS ITEMS.

Dustbins provided or renewed	436
Blocked drains and sink waste pipes cleared	142
Yard gullies renewed	1
Drains relaid or reconstructed	3
Inspection chambers repaired	2
Verminous premises disinfested	16
Inspection chamber covers renewed	1
Books disinfected	158

HOUSING.

Housing is undoubtedly the greatest problem of the moment. Next to food, good housing accommodation is absolutely essential to the health and comfort of all people. There is no need to reiterate the cause of the existing shortage as the position is recognised by everyone. The speedy provision of a large number of houses is vitally important and although such provision is mainly the concern of the government and local authorities, health departments are most conscious of the present urgency on account of bad overcrowding conditions frequently found with little or no prospect of securing any improvement. The existing conditions in the building industry also have considerable influence relating to the repair and reconditioning of houses which have been neglected during the war. Houses which in normal times would be considered for demolition will, out of sheer necessity, have to be retained for a further period. In my last annual report, I made reference to certain property which, even under present conditions, is not capable of being made fit for habitation, and after consultations with the Ministry of Health I made a further report on the lines indicated recommending that a Clearance Order be made. Reluctance on the part of the Ministry of Health to confirm Clearance Orders at the present time is understandable, but the condition of the property has to be seen to be appreciated. It is hoped that at least the empty houses will be cleared during 1946, as they are a potential source of danger in their existing condition.

HOUSING STATISTICS.

A. Inspection of Dwellinghouses during the year.

1. (a) Total number of dwellinghouses inspected for housing defects (under Public Health and Housing Acts) 64
 (b) Number of inspections made for the purpose ... 217
2. (a) Number of dwellinghouses (included under sub-head 1 above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 9
 (b) Number of inspections made for the purpose ... 11
3. Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation Nil
4. Number of dwellinghouses (exclusive of those referred to under the previous sub-head) found not to be in all respects reasonably fit for human habitation 64

B. Remedy of Defects during the year without service of Formal Notices.

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their Officers 23

C. Action under Statutory Powers during the year.

(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:—

(1) Number of dwellinghouses in respect of which notices were served requiring repairs 1

(2) Number of dwellinghouses which were rendered fit after service of formal notices:—

(a) By owners Nil

(b) By Local Authority in default of owners 1

(b) Proceedings under Public Health Acts:—

(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied Nil

(2) Number of dwellinghouses in which defects were remedied after service of formal notices:

(a) By owners Nil

(b) By Local Authority in default of owners Nil

(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936:—

(1) Number of dwellinghouses in respect of which Demolition Orders were made Nil

(2) Number of dwellinghouses demolished in pursuance of Demolition Orders Nil

(d) Proceedings under Section 12 of the Housing Act, 1936:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made 2

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit 2

D. Housing Act, 1936—Part IV.—Overcrowding.

Overcrowding is obviously inter-related to the Housing question and this most useful provision of the 1936 Act will largely remain inoperative until the housing position materially improves.

WATER.

An unrestricted supply of good soft water is provided direct to practically every house throughout the area by the Tees Valley Water Board. One (1) sample was submitted to the Public Analyst and the following is a copy of his report thereon:—

"		Parts per 100,000
" Chlorine as Chlorides		1,2000
" Nitrogen as Nitrates		.0570
" Ammonia		.0028
" Albuminoid Ammonia		.0082
" Oxygen Absorption		.5640
" Injurious metals		None
" Total solid matter dried at 100° C. ...		10.0000
"		
" Temporary Hardness ...	0.4°	
" Permanent Hardness ...	4.8°	
"		
" Colour of Sample on Hazen Scale ...		43
" Appearance of Sample in 2′ tube ...		not quite clear
" Odour when heated to 50° C.		None
"		

" **Microscopical Examination.**

" Considerable deposit from ½ gallon consisting of earthy " matter, vegetable debris, fungus growths and many micro- " organisms.

" **Bacteriological Examination.**

" Number of colonies on Nutrient Agar at	
" 37° C. after 72 hours	7 per ml.
" Number of colonies on Nutrient Agar at	
" 20—22° C. after 72 hours	8 per ml.
" Presumptive B. Coli Test at 37° C. after	
" 72 hours	Negative in 100 ml.
" Clostridium Welchii Test at 45° C. ...	Negative in 40 ml.
"	

" **Observations.**

" This sample affords no evidence of contamination by " drainage of an undesirable character, and it is of good and " wholesome quality for drinking purposes. The microscopical " result is not very satisfactory, although it can have no bear- " ing on the purity of the sample for drinking purposes, but " any deposit of this kind is likely to make a supply unsatis- " factory from the point of view of its appearance.

" (Sgd.) CYRIL J. H. STOCK.

The Engineer and Manager of the Tees Valley Water Board has informed me that bacteriological examinations are made daily of the supply as a whole, and weekly from a consumer's tap in this area. A chemical analysis is made fortnightly by an independent firm of analysts, the average results of which are good, and closely approximate the above analysis of the Public Analyst. There is no plumbo-solvent action and lead has not been found in any of the chemical analyses. The supply is chlorinated after treatment, a slight residue being maintained throughout the system.

DRAINAGE AND SEWERAGE.

Development of the district is largely dependent upon the provision of additional sewage facilities north of Billingham Station. The Council have given careful consideration to a large trunk sewer scheme which will provide the required facilities, and there is a possibility of the scheme being commenced during the latter part of 1946.

CLOSET ACCOMMODATION.

The number and type of conveniences attached to private houses and shops is given below:—

Privies	153
Water closets ...	5569

The question of converting approximately ninety-five (95) conveniences in Wolviston to the water carriage system is under consideration, and it is hoped that the work will be carried out during 1946.

PUBLIC CLEANSING.

The usual detailed report on refuse collection and disposal and the salvage of waste materials follows this report.

BAKEHOUSES.

There are only five (5) bakehouses, small in size and, on the whole, well conducted.

SHOPS.

The application of the Shops Act is affected by existing conditions. For instance, with regard to the maintaining of a reasonable temperature; this is very difficult in view of the shortage of fuel and the urgent necessity to reduce the consumption of gas and electricity to the minimum. Rationing and goods in short supply affects closing hours and, except for fish and chip shops, practically every shop in the district is closed before 6-0 p.m. With the end of the war and the lifting of blackout conditions, there has been no appreciable difference of this tendency to close at a much earlier hour. I believe the Home Secretary is considering the Shops Act in general and a Committee has been appointed to report thereon.

OFFENSIVE TRADES.

There are no offensive trades established in the urban district.

INSPECTION AND SUPERVISION OF FOOD.

A. Milk Supply.

During the year, twenty-four (24) samples of milk were taken for the usual bacteriological and the biological T.B. tests. As a result of the latter test, one sample was returned "positive" and, eventually, one cow was removed and slaughtered. A copy of the Bacteriologist's report is given below on the other tests applied:—

Sample No.	Micro-Organisms per 1 ml.	Coliform Content				Methlyene Blue Test	Grade
		1 ml	.1 ml	.01 ml	.001 ml		
464	15000	—	—	—	—	Reduced in 5½ hrs.	Non-graded
465	11700	—	—	—	—	„	„
466	106000	—	—	—	—	Reduced in 1 hr.	Tuberculin Tested
467	62000	+	+	+	—	Satisfactory	Pasteurised
468	450	—	—	—	—	„	Non-graded
469	21700	+	+	—	—	„	„
470	360000	+	+	+	+	Reduced in 2 hrs.	„
471	186000	—	—	—	—	Reduced in 2½ hrs.	„
472	11000	+	+	—	—	Satisfactory	„
473	46000	+	—	—	—	Reduced in 5½ hrs.	Accredited
476	408000	+	+	+	—	Satisfactory	„
477	442000	+	+	+	+	„	Non-graded
478	40400	+	—	—	—	„	„
479	36000	+	+	+	+	„	Accredited
480	256000	+	+	+	—	„	„
481	45000	+	+	+	+	„	Non-graded
482	over 500000	+	—	—	—	„	Accredited
483	4400	—	—	—	—	Reduced in 5 hrs.	Non-graded
484	216000	+	+	—	—	Reduced in 4 hrs.	Accredited
485	over 500000	+	+	—	—	Satisfactory	„
486	24800	—	—	—	—		Non-graded
487	26400	+	—	—	—		Pasteurised

On the whole, the samples are reasonably good, and I fail to see how any great improvement will be brought about when the powers now exercised by local authorities on farms under the Milk and Dairies Order are transferred to the Ministry of Agriculture and Fisheries, unless more and regular supervision is maintained. The "Appointed" Day under the Food and Drugs (Milk and Dairies) Act, 1944, has not yet been fixed. Meanwhile, supervision of milk production is being carried on under conditions which, to say the least, are rather complicated. The County Council are responsible for graded milk licences, the National Milk Testing and Advisory Scheme is still in operation, the County War Agriculture Executive Committee also appear to have something to do with the matter, and the local authority still retains its statutory powers.

The undermentioned licences have been granted for the sale of milk in the area:—

"Tuberculin Tested" milk ...	1
"Accredited" milk	—
"Pasteurised" milk	2

The following table gives the number of persons and premises registered:—

Register of farms and other places used as dairies ...	27
Register of retail purveyors of milk	16
Register of cowkeepers, dairymen and wholesale purveyors of milk	27

B. Meat and Other Foods.

Centralised slaughtering is still operated by the Ministry of Food, but when rationing of meat comes to an end, there will, I feel sure, be a demand for the return of slaughtering in private slaughterhouses. On the other hand, it might be possible that efforts will be made to retain the principle of central slaughtering, in which case the provision of either regional or municipal abattoirs will come under consideration. This is a matter which will most probably be settled by the Government and the trade concerned. The chief concern of a local authority will be to be assured that animals are slaughtered and properly inspected under the best possible conditions. Under prevailing circumstances, a box van is used for the distribution of meat, and whilst this method might be suitable as a wartime measure, there is room for considerable improvement. In normal times, when a butcher can buy the quality of meat he requires, he will not be satisfied to see warm meat dumped into a van and handled about considerably before it reaches his shop, as this most certainly detracts from the appearance of the meat. Other foodstuffs have received attention and the following is a list of articles condemned during the year:—

79 pkts. Barley Pudding Mixture.
9 pkts. Semolina Pudding Mixture.
25 x 10 st. bags flour.
22 lbs. Bacon.
14 lbs. Cheese.
1 lb. Lard.
14½ lbs. Butter.
4 lbs. Margarine.
2 x 10 st. bags sausage meal.
6 st. fish.
1 x 23 lb. bag self-raising flour.
2 lbs. Chopped Ham.
Entire carcase and offal of 17-st. pig.
91 tins miscellaneous foodstuffs.

C. Adulteration.

Twenty-seven (27) samples of food and drugs were submitted to the Public Analyst, and with two exceptions were reported genuine. The samples not genuine were of Egg Saving Powder found to be deficient in available carbon dioxide due to long storage, and Barley Pudding Mixture infested with mites. With regard to the former commodity manufactured some 3½ years before the sample was taken, the Analyst stated that at the time there were no legal or implied standards and withdrawal of the remainder of the stock could not reasonably be asked for. Regarding the latter commodity, the remainder of the stock (188 pkts.) was destroyed.

D. Chemical and Bacteriological Examination of Food.

All chemical work is done by the Public Analyst and bacteriological and biological examinations of milk supplies are performed at King's College, Newcastle-upon-Tyne.

SWIMMING BATHS AND POOLS.

It is pleasing to notice an increased use of the swimming pool by the general public. This is a particularly healthy form of recreation and should be encouraged as much as possible. Use of the slipper baths and swimming pool by members of the Services shows a considerable decrease due, no doubt, to H.M. Forces leaving the area. The figures, with corresponding numbers for last year, are given below:—

General Public	85,622	(65,786)
Members of H.M. Forces	1,561	(9,804)
Use of Slipper baths ...	784	(1,395)
	87,967	(76,985)

Two (2) samples of water taken during the summer were adversely reported upon by the Public Analyst due to an unduly high number of organisms growing on agar. This was apparently due to trouble with the filtration plant as a further sample, after adjustments had been made, gave the following splendid result:—

" Number of colonies on Nutrient Agar at " 37° C. after 72 hours	0 per ml.
" Number of colonies on Nutrient Agar at " 20—22° C. after 72 hours	0 per ml.
" Presumptive B. Coli Test at 37° C. after " 72 hours	Negative in 100 ml.
" Clostridium Welchii Test at 44° C. in 40 " ml., after 48 hours	Negative
" Free Chlorine in parts per million ...	Less than 0.10 part

"

" This sample is of a high order of bacterial purity, and it " is therefore of satisfactory quality.

"

(Sgd.) CYRIL J. H. STOCK."

SMOKE ABATEMENT.

During the war years people were prepared to accept this nuisance, and there is no doubt that due to a lessening of preventive measures and increased consumption of inferior coal, the dust and grit nuisance in Haverton Hill eventually became intolerable. In my last annual report I stated that due to the easing of the war situation, people were becoming increasingly conscious of this menace to the health and comfort of people in the affected area and steps were taken by the Council to secure at least some measure of relief. During the year, the Council visited the Works to discuss with representatives of the Firm the question of dust and grit emission and a full explanation was given regarding the action being taken to alleviate the nuisance. An inspection of the boiler plant was also made and the new dedusting apparatus inspected, which gave the Members of the Council an insight into the tremendous problems confronting the Company. The Members came away convinced that the Firm were making a determined effort to reduce this nuisance and I think it can be said that if the new dedusting equipment had not been installed on several boilers, the nuisance would have been substantially worse in the Belasis Lane area.

The Cement Works have also been kept under observation where the efficiency of the existing dedusters is being investigated.

INFECTIOUS DISEASES.

Details of infectious diseases are given in the report of the Medical Officer of Health. Routine enquiries are made into cases of Scarlet Fever and Diphtheria, which are removed to hospital and the premises disinfected. One hundred and fifty-eight (158) library books removed from infected houses were disinfected before being returned into circulation. Disinfectant is issued free with a small charge on the bottle to ensure return, 1,040 bottles being issued during the year.

RATS AND MICE (DESTRUCTION) ACT, 1919.

During the year the destruction of rats and mice has been actively pursued and the part-time Rodent Officer has done good work. Some eighty-four (84) premises, involving 282 visits, have been dealt with, resulting in 152 rats destroyed where the bodies have been found, with the certainty that this number would be considerably increased on account of the poison bait taken. Many of these infestations have been of a minor character only, but where houses or food premises are concerned, it is a relief to the tenants concerned to have the matter dealt with at once. The cost of the scheme for the year, including labour and materials, has been only £22 4s. 0d., which I should say is money spent to good advantage.

VERMINOUS PREMISES.

The undermentioned complaints of verminous premises have been received:—

	Bugs	Beetles	Fleas	Total
Council houses ...	2	2	—	4
Other houses ...	7	2	3	12
				16

The number of complaints received regarding verminous premises is very small, being fifteen (15) fewer than last year. I should like to think this is a true reflection on the position regarding infestations of this kind, but, judging by past experience, detailed housing inspections such as are made for slum clearance work would reveal a different state of affairs. It might well be the case that during the war years this kind of thing has been largely ignored due to more urgent matters engaging people's attention. D.D.T. in powder and liquid form is now readily available and results with this new insecticide will be watched with close interest.

ANNUAL REPORT ON REFUSE COLLECTION AND DISPOSAL FOR 1945/46.

Sanitary Inspector's Department,
Council Offices,
HAVERTON HILL,
May, 1946.

Mr. Chairman, Ladies and Gentlemen,

I beg to submit herewith my Sixteenth Annual Report on the collection and disposal of refuse in respect of the financial year ended the 31st March, 1946. The salvage of waste materials is carried out in conjunction with this service and full details of same are given in Appendix II. Looking back over the war years, there can be no evading the fact that this essential health service has deteriorated compared with the service provided in 1939. At that period, it was said that one's clock could be set by the regularity with which the dustmen called each week. The changed circumstances may be due to war conditions, older men employed, vehicles retained beyond their effective usefulness and the salvage of waste materials, but, after making due allowance for these factors, I am of the opinion that the time has arrived when some improvement should not only be expected but also forthcoming.

Various aspects of this work are discussed under appropriate headings.

I am,
Your obedient Servant,
A. H. RUSHWORTH,
Senior Sanitary Inspector.

Manual Labour.

The number of men employed is as follows, and their average age is 54 years:—

Foreman	1
Refuse collection and salvage of waste materials	17
Refuse disposal	1
Freighter driving	3
	22

The year under review has seen no easing of the labour problem, and although the work still remains under the Essential Works Order, I think this provision has served its purpose and is now more of a drawback than a help. Moreover, with work plentiful, the better type of workman is not readily attracted to this job, which is sometimes looked upon as rather disagreeable. During the year, wages have again been increased, so that the weekly wage, with cost-of-living bonus, is £4 19s. 6d. as against £2 13s. 0d. before the war. I am not suggesting that this is too much,and would favour paying even a higher wage for the right type of man. Wages amount to 89.5% of the total cost of the service, as against 86.07% for last year. The cost of sick pay is less than last year, but absenteeism shows an increase, a most undesirable feature which ought not to occur. Details of these two items are given below, with last year's figures in brackets for comparison:—

Sick Pay—Full		Sick Pay—Half		Absence	
Days	Amount	Days	Amount	Days	Hrs.
168	£135-5- 0	81½	£31- 9-4	277	—
(219½)	(£168-2-10)	(48½)	(£18-12-3)	(224)	(3)

Vehicles.

The usual details concerning the three SD. Freighters are given in the following tables, with last year's figures in brackets for comparison.

RELIABILITY.

Vehicle	Possible No. of hours	No. of hours lost for repairs	Percentage of hours worked
9 Cu. Yard (16½ yrs. old)	2,324 (2,312)	45 (101)	98.07 (95.63)
10 Cu. Yard (15½ yrs. old)	2,366 (2,362½)	139½ (137)	94.1 (94.2)
12 Cu. Yard (6 yrs. old)	2,367½ (2,359)	144½ (68)	93.9 (97.12)

RUNNING COSTS.

Vehicle.	Total Cost.	Wages.	Licences, etc.	Petrol, Oil and Grease.	Repairs and Renewals.
9 Cu. Yd.	416-15-8 (375-0-3)	275-11-1 (236-0-5)	36-0-7 (47-1-0)	95-11-9 (69-4-5)	9-12-3 (22-14-5)
10 Cu. Yd.	436-18-0 (433-19-9)	273-16-1 (247-15-2)	41-0-7 (42-1-0)	89-19-11 (86-10-11)	32-1-5 (58-12-8)
12 Cu. Yd.	533-5-6 (462-2-11)	287-17-5 (214-8-5)	44-15-7 (57-6-0)	101-6-5 (114-16-1)	99-6-1 (75-12-5)

NUMBER AND WEIGHT OF LOADS REMOVED.

Vehicle	No. of Loads Removed.	Weight per Load.	Total Weight.
		T. C. Q.	T. C. Q.
9 Cu. Yard	726	2 8 1	1751 9 2
	(656)	(2 8 1)	(1582 12 0)
10 Cu. Yard.	584	2 8 1	1408 18 0
	(665)	(2 8 1)	(1604 7 1)
12 Cu. Yard	509	2 18 1	1482 9 1
	†124	† 9 0	† 55 16 0
	*29	* 8 2.5	* 12 10 0
	(626)	(2 18 1)	(1823 4 2)
	Total Tonnage ...		4711 2 3
			(5010 3 3)
Horse & Cart (Night Soil)	100	15 0	75 0 0
	(100)	(15 0)	(75 0 0)
	Grand Totals		4786 2 3
			(5085 3 3)

† Waste Paper. * Kitchen Waste.

MILES PER LOAD AND PETROL CONSUMPTION.

Vehicle.	No. of Loads Removed	Miles Run.	Petrol (Galls)	Miles per Gallon	Miles per Load.
9 Cu.Yd.	726	3,278	931	3.52	4.51
	(656)	(2,309)	(650)	(3.54)	(3.52)
10 Cu. Yd.	584	3,743	870	4.3	6.4
	(665)	(2,961)	(849)	(3.49)	(4.45)
12 Cu. Yd.	662	4,503	1102	4.08	6 8
	(626)	(4,060)	(1270)	(3.19)	(6.49)

The two machines which have been in use since 1929 and 1930 respectively are to be replaced next year and this should prove of great benefit. The first machine bought has been kept going only with the greatest difficulty and in normal times would have been replaced some years ago. This applies also to the second machine. No. 3 machine has lost most time for repairs but this is accounted for by gear box trouble and a complete engine overhaul. Running costs are up to some extent due to wage increases but there is a useful reduction in licence duty. Weight of loads removed is based on test weighings carried out years ago and might well be reconsidered when the opportunity arises. The total number of miles run shows an increase due to the new refuse disposal site coming into use during September, 1945. This is also reflected in a longer run per load and a better miles per gallon petrol consumption.

Refuse and Salvage Collection.

As will be gathered from my opening remarks to this report, I am by no means satisfied with the refuse collection service which exists at the present time. During the war, allowances could be made for several reasons but, now, waste materials collected are much reduced, and tiredness, due to disturbed nights from air raids, has not to be taken into account. Looking at the problem from the 1939 angle, two machines and 15 men were giving a regular once weekly collection, although somewhat extended, and I asked for an additional vehicle in July, 1939, which was delivered in December of the same year.

Broadly speaking, the number of premises remain the same, so that with 3 machines and 20 men, plus a foreman, the job should be done more efficiently. From these facts it is quite clear that output per man has gone down. Whether or not this is a temporary phase and will improve with new machines and a few younger men, remains to be seen.

Collection of salvage is made at the same time as household refuse, a system which has worked quite well apart from kitchen waste, which should be collected more frequently for obvious reasons.

Refuse Disposal.

The disused clay pit adjoining Cowpen Lane Estate, which has been used for refuse disposal for more than 20 years, was completed during the year. This has been an excellent site in many ways, being central and of a uniform depth. A new site has been obtained adjoining Sandy Lane and some distance away from the nearest houses. The land is water-logged, covered with sedges and quite unsuitable for any other use. With careful handling and provided sufficient soil can be obtained for cover, the site should be a very suitable one. The haul is, of course, longer as this site is on the extreme west boundary of the area.

Collection and Disposal of Night Soil.

Privy middens at Wolviston are emptied weekly by contract but the sooner these conveniences are converted to the water carriage system, the better. It has not been possible to find anyone to empty the privy middens at Cowpen Bewley and the work is done partly by farmers and the Council. Conversion in this district will not be possible until the new trunk sewer is laid.

Number and Type of Receptacles.

Dust Bins	5,697
Privies	153
Ashpits	16

Cost.

The usual detailed account of expenditure and income is given in Appendix I, with last year's figures in brackets for comparison. Costs again show an increase due to wage increases, whilst disposal costs are affected by the new tip, due to the expense of constructing a new approach road.

APPENDIX I—HOUSE AND TRADE REFUSE.

Table showing Costs for Year ended 31st March, 1946.

	COLLECTION		DISPOSAL.		TOTALS.	
	Including Depreciation or Loan Charges.	Excluding Depreciation or Loan Charges.	Including Depreciation or Loan Charges.	Excluding Depreciation or Loan Charges.	Including Depreciation or Loan Charges.	Excluding Depreciation or Loan Charges.
Revenue A/c.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
A. Gross Expenditure	5998 19 9 (5604 15 9)	5777 3 0 (5358 7 9)	1030 0 11 (314 19 2)	351 19 6 (242 4 2)	7029 0 8 (5919 14 11)	6129 2 6 (5600 11 11)
B. Gross Income	871 14 8 (1089 12 11)	871 14 8 (1089 12 11)			871 14 8 (1089 12 11)	871 14 8 (1089 12 11)
C. Net Cost	5127 5 1 (4515 2 10)	4905 8 4 (4268 14 10)	1030 0 11 (314 19 2)	351 19 6 (242 4 2)	6157 6 0 (4830 2 0)	5257 7 10 (4510 19 0)
Unit Costs						
D. Gross Expenditure per ton	1 5 0.8d (1 2 0.5d)	1 4 1.7d (1 0 9.7d)	4 3.6d (1 2.8d)	1 5.6d (11.4d)	1 9 4.4d (1 3 3.3d)	1 5 7.3d (1 2 0.3d)
E. Gross Income per ton ...	3 7.7d (4 3.4d)	3 7.7d (4 3.4d)			3 7.7d (4 3.4d)	3 7.7d (4 3.4d)
F. Net Cost per ton	1 1 5.1d (17 9.1d)	1 0 6 (16 6.3d)	4 3.6d (1 2.8d)	1 5.6d (11.4d)	1 5 8.7d (18 11.9d)	1 1 11.6d (17 8.9d)
G. Net Cost per 1,000 population	229 11 5 (215 0 1)	219 12 9 (203 5 5)	46 2 4 (15 0 0)	15 15 2 (11 10 8)	275 13 9 (230 0 1)	235 7 11 (214 16 1)
H. Net Cost per 1,000 houses or premises from which refuse is collected ...	912 16 2 (803 2 4)	873 6 3 (759 5 9)	183 7 7 (56 0 5)	62 13 3 (43 1 7)	1096 3 9 (891 3 1)	935 19 6 (802 7 6)

RATE POUNDAGE:—

J. NET COST: Equivalent rate in £ 6.6d (5.3d). K. PERCENTAGE of J. to TOTAL RATES in £ ... 3.9% (3.2%).

(1) Total refuse collected (includes 75 tons of night soil) ... 4,786 (5,085) tons.
(2) Population 22,334 (21,000).
(3) Weight per 1,000 population per day 11.74 (13.23) cwts.
(4) Number of houses and premises 5,617 (5,622).
(5) Rateable Value £233,595 (£224,526).
(6) Product of a penny rate £932 (£899).
(7) Total Rates in £ 14s. 0d. (13s. 6d.).

APPENDIX II.

SALVAGE OF WASTE MATERIALS

EXPENDITURE.

	1944-5. £ s. d.	1945-6. £ s. d.
WAGES, ETC.:		
Wages	902 4 1	645 13 2
Holiday Pay	15 17 10	32 19 3
Sick Pay	5 8 4	35 15 3
Bonus	124 3 2	65 17 3
Insurance and Superannuation	30 12 10	28 2 6
	1078 6 3	808 7 5
WORKING EXPENSES:		
Advertising & Printing	3 19 5	2 19 6
Balax and Wire	5 9 6	11 9 0
Rubber Stamp, Pad & Ink	2 9 0	
Freighter Charges for delivery of Kitchen Waste to Middlesbrough, less wages	10 6 8	9 19 8
Repairs to Baling Press	1 2 6	10 2 8
Repairs to Salvage Hut	9 5	33 5 10
Pliers	3 6	7 0
Workmen's Overalls	3 5 0	6 10 0
	27 5 0	74 13 8
TOTAL EXPENDED	1105 11 3	883 1 1
TOTALS	£1105 11 3	£883 1 1

INCOME.

	1944-5. T C Q lbs. £ s. d.	1945-6. T C Q lbs. £ s. d.
PAPER:		
Mixed	98 15 2 24 620 16 3	11 13 0 16 711 16 5
Newspaper	1 14 2 12 14 8 8	1 1 3 12 9 5 10
Magazines and Books		15 3 0 5 10 3
	100 10 1 8 644 4 11	113 10 3 0 726 12 6
SCRAP:		
Baled Tins	33 13 3 0 67 7 6	4 4 2 0 8 9 0
Mixed Scrap	15 0 0 0 16 3 0	3 2 0 0 15 6
Non-Ferrous Metals	9 2 0 12 4 0	11 2 0 11 10 0
	49 3 1 0 95 14 0	7 18 0 0 20 14 6
RAGS, ETC.		
Rags	9 10 3 0 188 6 3	6 9 1 0 76 7 9
Matting	2 13 0 0 6 19 0	1 9 3 0 3 0 0
Bagging	2 6 3 0 12 6 11	1 16 0 0 6 5 11
String	7 3 0 1 5 6	1 3 0 6 2
	14 18 1 0 188 17 8	9 16 3 0 85 19 10
BONES:	1 11 0 0 7 7 3	
KITCHEN WASTE:	32 18 2 0 49 7 8	12 10 0 0 18 15 0
JARS AND BOTTLES:		
Milk Bottles	25½ doz. 12 9	
Domestos Bottles	6 ,, 9 0	9 doz. 13 6
Jars—1 lb.	2506 ,, 93 19 6	316 ,, 11 18 8
,, 2 lb.	90 ,, 4 10 0	22 ,, 1 2 0
Other Bottles	18 ,, 13 6	
	2645½ ,, 100 4 9	347 ,, 13 14 2
BALANCE: Loss on year's working	19 14 6	17 5 1
TOTALS	£1105 11 3	£883 1 1

The above is a statement of expenditure and income on the collection of waste materials for the year ended the 31st March, 1946. The previous year's figures are given for comparison. Gross income again shows a decrease. This is due to a decrease in the collection of all materials except paper which, surprisingly, shows an increase. A very useful collection from a Works source has made this possible. The collection of kitchen waste is poor and with a weekly collection this is only to be expected, as householders will not keep this smelly material about the house for a week, and there is no doubt that a regular collection 2 or 3 times a week would produce much better results. What the cost of such a service would be is another matter. There is no doubt that the emphasis is now on paper, bones and kitchen waste.

Regarding expenditure; this slightly exceeds income. As I have previously pointed out, the question of profit and loss is somewhat an elastic one and can be varied at will according to the amount of collectors' wages allocated to this service as distinct from refuse collection and disposal. It can be argued that the whole of this material would have to be collected as refuse, but, on the other hand, less time would be involved in handling as everything would be put into the dust bin and no sorting or separate collection involved, therefore, less cost would be incurred. In this report, I have debited all wages directly charged to the job and allocated what I consider a fair amount in respect of collection working on the assumption that should salvage be discontinued entirely, the equivalent in manual labour could be dispensed with.

A. H. RUSHWORTH,
Senior Sanitary Inspector.